

WATER SYSTEM UPDATE 9/28/16

The Drought Management Crisis Team met on Tuesday, September 27th.

Forecast

Meteorologist Tim Kelley (NECN) reports: A significant weather pattern change is underway. A series of wet windy storms are moving inland from off the coast from Florida to New England.

For the past 16 months or so, storms have been missing Scituate by going to the west and east; now it looks like we are getting back in the groove.

Today begins a multi-day Nor'easter. Initially dry, but turning wet Friday. We may get an inch+ of rainfall Friday and possibly 2-3" Saturday through Tuesday. This weekend and into next week expect wind from the northeast at 20-40 mph. Expect at least minor coastal erosion. Fortunately, even though there will be a new moon, astronomical tides are only running 10-11 feet, but surge and surf may get us over 12 feet.

There is going to be a major hurricane "Matthew" threatening the entire east coast of the USA. Scituate may get another dose of rain from Matthew (also, we may see additional hurricane threats October 6 -10.) Water Supply

- The Water Department continues to supply Scituate needs exclusively from the wells (ground water). The Reservoir (surface water) remains unchanged at minus 82 inches, equating to 21.3% full.
- On Monday the Boston Globe reported on the drop in ground water levels across much of the Commonwealth. "'Ground water typically drops to its lowest point in the fall before rebounding. This year low levels have been reached prematurely.' said Jonathan Yeo, director of water supply protection for the Massachusetts Department of Conservation and Recreation. 'Even once we start to consistently get more normal amounts of precipitation, it can take a while for that water to soak in and replenish aquifers, the underground storehouses of water that wells tap into.' For the 29 sites across the state where conditions can be monitored in real time, all but three sites last week were 'below normal' or lower. Six sites were 'much below normal,' and seven others were labeled 'low,' the lowest possible classification." One of the seven wells in this lowest category was the one nearest Scituate located in Plymouth County. The Water Division continues to operate our 5 wells with a cautious eye on ground water levels.
- All equipment, procedures and agreements are in place with Cohasset to provide water to Scituate in the event our Reservoir drops to 10%.
- Rainfall on Saturday as measured in Greenbush by the water treatment plant personnel totaled 0.17 inches. Monday's rain totaled 0.42 inches.

Water Usage

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- Daily water consumption in the past seven days was 6% higher than
 the previous week. The average daily usage was 1,121,286 gallons per
 day, equivalent to 62 gallons per person per day. Conservation by our
 residents and businesses remains the single biggest factor that will
 enable us all to get through this extraordinary period of drought.
- Helpful water saving tips sent in by fellow residents are posted on the Town's website. Send yours to conservewater@scituatema.gov
- When draining pools this fall, think about ways that you could put that water to good use.
- · Violations: There were no water ban violations cited in the past week.
- There has been an increase in brown water problems recently. Typically
 this time of year the Water Department begins flushing water mains to
 force out brown sediment (iron deposits that naturally occur in ground
 water and settle in our pipes). Because of the water shortage caused by
 the drought, the Department is delaying this process until the Reservoir
 recovers.
- Lawns all over Town have gone dormant and turned tan or light green.
 Healthy grass has been using this dry period to put down deeper roots.
 This will strengthen these plant materials and help them weather future dry periods. The recent sprinkles of rain have begun to bring lawns out of their dormant state. While there may be some dead patches, the majority of lawns will spring back to a good healthy state once the rains return.

Future Resiliency

- Expansion of the Reservoir: We expect to hear in late October if the Town's grant application for funds to advance the project to increase the Reservoir is approved.
- Dolan Well Field: On Tuesday the Town met with the Department of Environmental Protection (DEP) in Lakeville to discuss the permitting process for developing the Dolan Well Field located off of Country Way in North Scituate. While the well field received a permit in the early 1980's, the permit has expired. The DEP provided good guidance on how to proceed with re-qualifying this well. The process of testing and permitting will take about three years, but the prospects of the well being productive are good.

Outreach and Education

 NSRWA and the School Department are developing additional water conservation awareness and training for use in the classroom.